

With the Compliments of
J. A. G.

QUEEN'S UNIVERSITY AND MEDICAL EDUCATION.

AN ADDRESS DELIVERED AT KINGSTON, OCT. 14, 1892.

BY SIR JAMES GRANT, M.D., K.C.M.G., OTTAWA, ONT.

The present is a new departure in the life history of the Royal College of Physicians and Surgeons, Kingston. It is a move certainly in the right direction, and one which cannot fail to be productive of good, to the well-being of the medical department of Queen's, which the medical section has now virtually become. Queen's Medical School has been in operation over a quarter of a century, and its graduates are filling positions of trust and responsibility in various portions of the world. One of its founders was a personal friend of my own, the late Dr. Dickson, who was the first President of the College of Physicians and Surgeons of Ontario. His record was a most honourable one, and in his calling he was a noted surgeon and a well known contributor to the literature of the profession. The zeal, energy and ability with which he laboured to carry out the work of this medical school is well known, and the record he made as a man of genuine scientific and professional merit is generally acknowledged. From this time actually dates the very commencement of systematic medical education in the Province of Ontario. True, we had good medical schools and excellent medical men prior to that date, but the Medical Council, in which as first president Dr. Dickson took an active part, gave new life and vigour to the whole subject of medical

education in this Province. The curriculum advanced stage by stage to the present high standard of a five years' course of study and a preliminary examination, almost the equivalent of a B.A. degree, in order to meet the demands of our country that only men of educational standing and known ability shall be admitted into the ranks of the medical profession. This is said to be an age of general progress and advancement in almost every line of thought. True, in Canada we have legislative confederation of our various Provinces, and why? In order that there might be a uniformity in trade and commerce and thus understand each other better in all the relations of life. In medical education, however, this idea is not being carried out. What do we find to-day? Each Province legislating for itself in matters medical, and no special effort being made to bring about central examining boards or councils in each Province, of equal standing, so that medical degrees of one Province would pass current in any other Province, without being subjected to a second examination. Failing this course, the only other open is for all the Provinces to agree to a central examining and registering body at the capital, the license of which would be recognised in the entire Dominion. This would require a change in the British North America Act which could be so modified as to meet the requirements of our people, providing each Province agreed to such changes. The present state of medical education must shortly undergo some change in order to give evidence of a progressive spirit in our people, and such can only be brought about by placing the whole subject, so intimately associated with our welfare and prosperity, before the *proper tribunal*. The authorities of Queen's are to be congratulated on the large class of young men entering upon the study of the medical profession, possessing, from general appearances, a fair share of both mental and physical powers—so necessary in life's struggle at the present time.

The student of this date certainly labours under great advantages, surrounded as he is with all the varied appliances for scientific investigation, and a well qualified staff of professors, in the various departments of the medical course. True, our pro-

fessions are becoming crowded, and yet there is ample room in the upper rungs of the ladder of fame, which can only be reached by care, energy, perseverance and time, an exceedingly important factor in the path of duty and success. Such is truly in keeping with the sentiment of the great American poet—

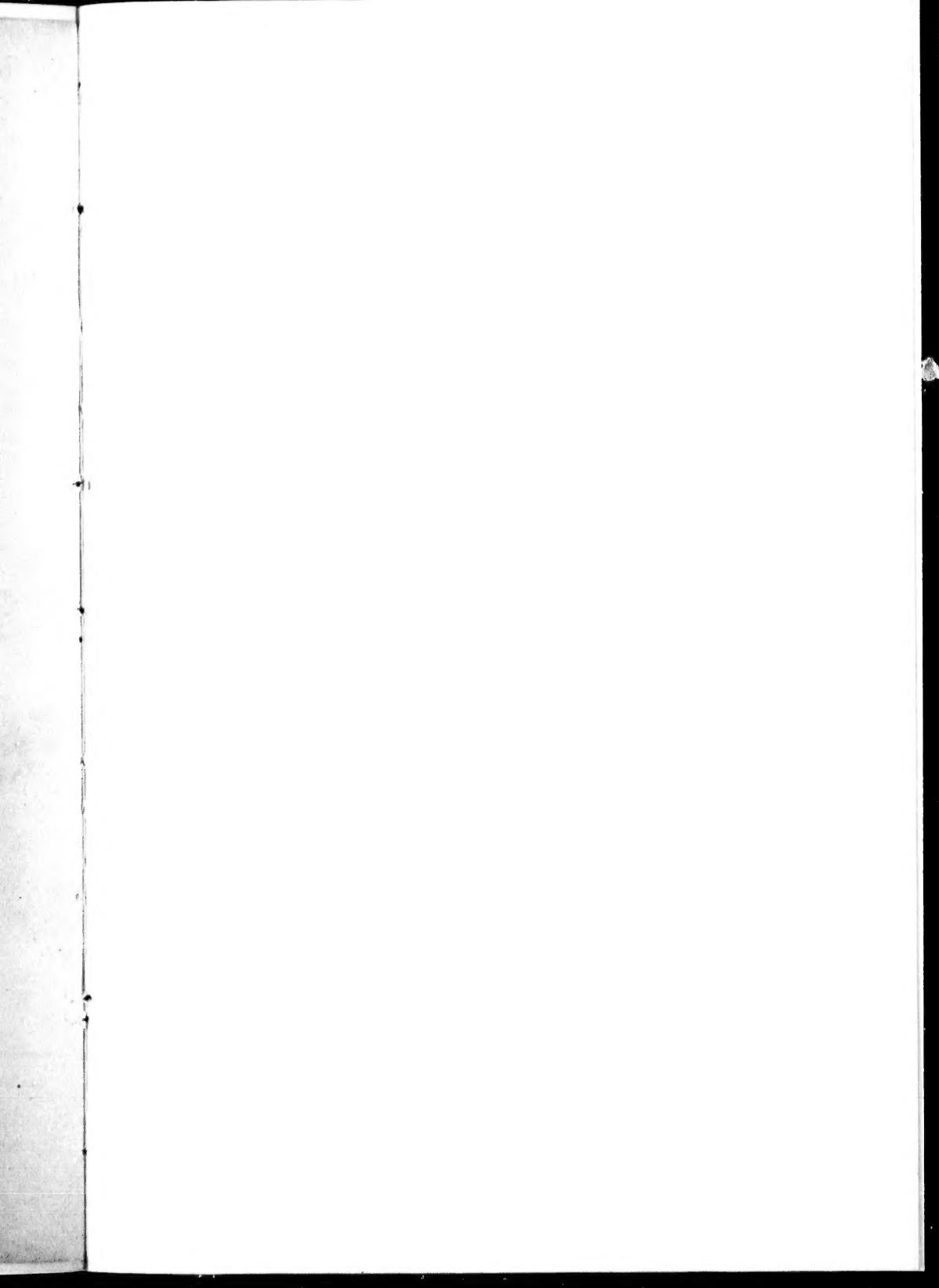
" Let us then be up and doing,
With a heart for any fate,
Still achieving, still pursuing,
Learn to labour and to wait."

Our country is large and our population steadily increasing, but not so rapidly as I could wish ; however, with the present energy in that direction, we hope to see the most sanguine expectations fully realized.

The higher functions of medicine are now before you, which even extend beyond the healing of the sick : the instruction of the masses as to the means and methods by which disease may be prevented and death deprived of its supremacy and power. In the medical schools of the present in Canada, sanitary science is one of the chief subjects of study, and by this line of investigation we have hope that in the near future the contagious diseases, like scarlet fever, measles, cholera, etc , will be as effectually stamped out as small-pox is to-day. True, the fluids we drink, such as milk and water, occasionally contain the germs of typhoid fever, scarlet fever and diphtheria, and in this line of investigation how marked have recently been the marvellous results of science and how greatly has the death rate from such causes been reduced. In the path of progressive medicine what a marked change has taken place even in hospitalism, by which such dreaded diseases as puerperal fever and hospital gangrene have been in a great measure stamped out. This is a line of duty and labour worthy of serious thought—how if possible to prolong life, by preventing outside or accidental influences so operating on the human frame as to cut short the vital spark, often in the very prime of life. To be successful in preventing the causes of disease is certainly noble work that will carry blessings to thousands and mark in a most positive manner the progressive character of the age in which we live. It is only within a short period that this truly humanitarian movement has

stirred up sanitarians of the world and thus aroused the interest of the general public. The great sanitary congress held last year in London and presided over by H.R.H. the Prince of Wales was an evidence, should such be wanting, illustrative of the deep interest now being taken in public hygiene.

Science has much to do with the possible triumphs of sanitary reform. It is the art, however, not the science alone—the doing, not exactly the knowing, that must take first rank in the medical work of life. It is, in fact, the actual bearing of the necessary training that directs the after life-work of the physician. Doubtless there is great value in science, and in medical practice such science as can be turned to practical account, does far more to build up a professional reputation than *accumulated theories*, which cannot in any way be applied to the really great work of the physician. Doubtless you have profited by the application of this form of medical training, scientific in its character, and at a time of your mental evolution, when the formation of habits of observation is of the greatest possible value. It is the care and accuracy of your observations and practices, the soundness and balance of your judgment, which will alone enable you to turn to practical account the varied knowledge you have acquired. The application of scientific methods and a scientific mind to the problems of disease is actually more than the study of a single life-time. Let man rejoice in the promotion of truth. True, science is ever humble, and discoverers such as Newton and Faraday were the humblest of men. How vigorous have been the attacks on Sir Joseph Lister, the father of antiseptic surgery, and with what commendable spirit he upheld his position, marking beyond doubt the greatness of the man. It is well to be up and doing, keeping pace with every line of advance in our profession. True, we are living in an age remarkable for its discoveries. The younger members must not run away with the idea that the aged fathers in the profession are not likewise progressive. This is a reading age as well, in which current medical literature is almost superabundant, and young and old must labour and continue to work in order to keep anything like pace with the progress of science. The affiliation of



the various sciences by the present change in the medical department does away with the isolated form in which matters were previously. Thus the different sciences take, notwithstanding the diversity of their objects, one and the same development. The one series of ideas brightens and fructifies mental power, the other tends to promote health, strength and general systemic vigour.

When a student graduates, what course should he adopt in order to insure public confidence and gain a practice? When he has selected the place in which he has decided to pursue his professional work, there are points of the greatest possible importance to be investigated. First, study carefully the physical character of the city or country section in which he resides, as to soil, drainage, water supply, food supply, public and private schools, endemics, epidemics and all such influences. Once he has familiarised himself on these points, he is then in a position to give confidence to those he may be fortunate enough to attend professionally. During the past few years the Ontario Government, through the Board of Health Department, has accomplished much in the line of public sanitation, and through energetic exertions the death-rate in this Province has undoubtedly been reduced. A move is now on foot to establish a "Health Institute" at Ottawa for the Dominion; however, such is at present in the incipient stage of development, the only specified information from the Dominion Government (until recently) being the mortuary statistics, issued monthly by the Department of Agriculture. In time we anticipate more energetic action in this direction, as nothing tends more to advance the interests of the public at large than what concerns public health. In country sections the matter of drainage cannot be too clearly observed. How frequently, in farm-yards, the surface liquid from manure heaps drains into the water supply of the animals, thus communicating impurity to the milk supply of the nearest town or city, and frequently becoming a fertile source of disease. What, also, is more important than the careful inspection of meat in order to guard against the spread of such diseases as tuberculosis. True, so far, in Canada our food

supply, on the whole, is pure and simple, and yet too much care cannot be exercised as to proper inspection in this direction.

Another point of most importance is the study of *the influence* the present system of education is producing on the germinal intellectual power which must in time guide and direct the best interests of our Dominion. The great effort at present is towards a species of hot-house culture, as far as education is concerned. The multiplication of subjects, even with pliant and undeveloped child-like brains, in the very formative process, becomes a serious problem, and one which cannot be too carefully studied out and directed accordingly. Each thought, each mental evolution is the production of a chemical change in the elements of brain tissue, and thus the successive flashings along the line of continuous mental strain have a powerful effect, not alone on brain structure, but the general systemic powers as well. How is education to be accomplished without brain strain, is a cogent question, and one which will very naturally be asked. Ordinary brain effort is one line of action, but over strain and excessive brain work is quite another. How frequently is it the case that the highest indications of brain activity in the child by over-strain, and without the parents being aware of the fact, become clouded for the duty of after life. The same result is frequently observed with honour men in university life, although there are exceptions, where inherent physical power, guards the balance and thus upholds the system.

These are points to which I desire to direct the attention of our young graduates, who may have an opportunity of quiet study and patient investigation, while seeking a practice which will grow gradually and surely as public confidence is gained, on these lines of observation.

In conclusion let me say, you have enjoyed the able services of Professor Williamson, who for over forty years has been connected with Queen's University. He has made a most honourable record, and the influence he has exercised in the development of germinal intellectual power has greatly redounded to the credit of Queen's University. What more honourable calling in life can there be than that of a teacher? This University is

the parent of many, in various distinguished academic positions. Thus the impress of this centre of learning is transmitted from one generation to another. The teachers' work does not die with him. It lives after him, and in the discharge of the honourable responsibilities of life the still small voices hover round ; hushed though they be, the impression of the past is there, and is a cheering ideality in the perplexities incidental to a labour of love—*medical duty*. Thus we observe there is a grand connecting link established, which strengthens the attachment and promotes an ever living desire to uphold the honour and dignity of your Alma Mater.